5

1. (Currently Amended) Device for [[the]] a transdermal administration of an active compound, comprising a current generator and at least one pair of electrodes for application to on skin of a patient, one of which must be suitable said electrodes for holding a vehicle containing the active compound to be transdermally administered, characterized in that wherein said generator generates a one-way current applied between said electrodes which is modulated in amplitude by a modulator of a periodic nature.

- 2. (Currently Amended) Device according to claim 1, characterized in that wherein said modulator has an amplitude which can vary between zero and a maximum value.
- 3. (Currently Amended) Device according to claim 1, characterized in that wherein the one-way current has a positive sinusoidal waveform.
- 4. (Currently Amended) Device according to claim 1, characterized in that wherein the one-way current has a rectified sinusoidal waveform.
- 5. (Currently Amended) Device according to claim 1, characterized in that wherein the one-way current has a half-sinusoidal waveform.
 - 6. (Currently Amended) Device according to claim I, characterized in that wherein the

one-way current has a triangular or sawtooth waveform.

- Device according to claim 1, characterized in that wherein the one-way current has a square waveform.
- 8. (Currently Amended) Device according to claim 1, characterized in that wherein the modulator has a waveform selected from [[the]] a group comprising: a triangular waveform, a rectified sinusoidal waveform, a halfsinusoidal waveform or combinations thereof.
- 9. (Currently Amended) Device according to claim 1, characterized in that wherein the one-way current has a frequency of between 100 and 3000 Hz.
- 10. (Currently Amended) Device according to claim 1. characterized in that wherein the modulator has a frequency between 0.1 and 5 Hz and preferably between 0.5 and 1 Hz.
- 11. (Currently Amended) Device according to claim 1, characterized in that wherein the one-way current applied between the electrodes has a maximum value of 100 mA.
- 12. (Currently Amended) Method of administering an active compound by transdermal means, comprising the stages of: applying two electrodes on skin of a patient, one of which is associated with a vehicle containing the active compound, generating a one-way current

between the two said electrodes which is modulated in amplitude by a modulating signal of a periodic nature to transdermally transfer the active compound.

- 13. (Currently Amended) Method according to Claim 12, characterized in that wherein said one-way current has a waveform selected from [[the]] a group comprising: a rectified sinusoidal wave, a half-sinusoidal wave, a sawtooth wave, a triangular wave, a square wave, a positive sinusoidal wave, a train of pulses.
- 14. (Currently Amended) Method according to claim 12, characterized in that wherein said modulator has a waveform selected from [[the]] a group comprising: a triangular waveform, a sawtooth waveform, a rectified sinusoidal waveform, a halfsinusoidal waveform or combinations thereof.
- 15. (Currently Amended) Method according to claim 12, characterized in that wherein said modulating signal has an amplitude which can be varied between zero and a maximum value.
- 16. (Currently Amended) Method according to claim 12, characterized in that wherein said one-way current has a frequency of between 100 and 3000 Hz.
 - 17. (Currently Amended) Method according to claim 12, characterized in that wherein

5

said modulating signal has a frequency of between 0.1 and 5 Hz and preferably between 0.5 and 1 Hz.

- 18. (Currently Amended) Method according to claim 12, characterized in that wherein the one-way current between said electrodes varies between zero and a maximum value equal to 100 mA, maximum value of 100 mA.
- 19. (New) A device for a transdermal administration of an active compound, the device comprising:
 - a first electrode for application on skin of a patient;
 - a second electrode for application on skin of a patient;

means associated with said second electrodes for holding a vehicle containing the active compound to be transdermally administered; and

- a current generator connected to said first electrode and connected to said second electrode, said current generator generating a one-way current applied between said electrodes which is modulated in amplitude by a modulator of a periodic nature.
- 20. (New) A device according to claim 20, wherein said modulator has an amplitude which can vary between zero and a maximum value; and the one-way current has a positive periodic waveform.